Joan Glickman:
So again, thank you for calling in. I look forward to hearing your questions and comments. So please type those in as you think of them. I'll give a quick overview of the program, it sounds like some people are not familiar with the program, so I will do some background, and then tell you what we've learned in the last year, during our first year of implementation, and to give you an overview of what is new about the program, and what we are planning in the upcoming year. And then tell you what happened with the actual scoring tool because we have made some changes, and it was just released in December. Our most recent version of that tool. OK, so going to slide 5.

Slide 5:
So, as you can see the Home Energy Score is meant to be a simple basic piece of information that you can give to a homeowner or a home buyer. It tells the consumer how the home is scoring today, and in this case the home's current score is 5. And what it could score with improvements like. So cost effective improvements like sealing your ducts or putting more attic insulation in or even replacing some piece of equipment. What could be, what could be improved in terms of efficiency, and how much they save with those improvements? It's meant to be sort of a "miles per gallon" "MPG" rating for homes. So, you know, when go buy car, you get a little sticker that will tell you, you know, this car is going to get 30 miles per gallon. And this one will get "45", and this one will get "17". And then obviously that not going to be the only thing you pay attention to when you're buying a car, and we don't expect this will be the only thing to pay attention to when they're buying a home. Obviously the location, and schools and what kinds of [inaudible] and all that will determine what kind of kind of home you are going to buy, but we do think this is useful information that can help inform the decision and can also help if the home buyer wants to make improvements in the first year of home ownership or beyond, it can give them a sense of that would be cost effective to do, and what could save them money and save them energy. It's a lost-cost service. And that was one of the reasons we put it together. It was meant to be something you could do of a full home energy audit. Not that those are not useful, they are, but this is meant to be a quicker assessment that somebody could do in an hour if they are not doing anything else in the home. Or if they are doing some other type of assessment or collecting information, it shouldn't take more than about 15 minutes to collect the information and score the home. It does not include any diagnostics, and it's not intended replace a full energy audit. Obviously that will give you much more detailed information. We've done a lot a lot of analysis over the last three years, and we are very pleased with where the scoring tool and system is today. But we continue to be improving the tool and the program. And I will talk a little about the research that we have underway right now to do that. OK, slide 6.

Slide 6:
So this is the first piece of information that a home owner or home buyer would get. As I said, it just gives you some basic information; the address, how much square footage it has it terms of condition square footage, when it was build and then again how the home scores today, and how it could score with improvements. It also give some information on, so you can go back and find this information. It gives you some record information in terms of when it was done, what the score the ID is, and who did it.

Slide 7:
Slide 7 is just showing you basically you get home fact which are - it's a list of the data that was used by the home assessor, when they went through the home and collected information about your roof, your foundation, your heating/cooling, etc. All the information they put into the tool is meant to be just a basic record for the homeowner in case they would like to go back, and see what was included. It also includes the information that the tool outputs. In terms of estimates of total energy used. As well as estimates of just what would be used by the heating cooling and hot water components of the home, which is what we consider the assets energy use. And it also breaks that down into the different fuel types used by the home. Whether it is electricity or natural gas or oil. Etc.

Slide 8:
On slide 8 you'll see some generic or I should say some standard kinds of recommendations you might get out of the scoring tool and they are broken out into: What you can do now like, you know, sealing your ducts and putting in more insulation. And then what you can do later when you're ready to replace equipment like your heating system, your cooling system, your water heater. If you as a program manager or an assessor choose to, you don't need show the homeowner these recommendations, but we do ask that you provide some so if you feel that as an assessor you have a better sense of what should happen in the house, you can provide your own recommendations in place of these. You know, we recognize that this is a national tool As good as it is, it’s not going to be probably as specific in terms of what make sense for an individual house. So we certainly have that flexibility. On the other hand, if you don't have the resources at the time to come up with your own recommendations, we think the tool does a pretty good job of developing recommendations for the home.

The scoring tool is pretty easy to use. Lots of people have used it. I think we have like 180-plus assessors at this point. We've made improvements. We have you know, tips. So under each section of the scoring tool you can go in, and there is a question mark, and you can click on that and it will give you additional information in case you have forgotten how it is that we are requesting. And what specific information we are requesting for in that area of data. And you can use the scoring tool to, as I said, if you are using your own recommendations, you can use it to rescore the home with those recommendations. So, as you saw on the first page, it showed that home was getting a 5, and it could get to a 7. Perhaps with your recommendations it could get an 8 or a 6 or whatever. And then you could do that and develop the score based on that information. Slide 10: Slide 10 is just a quick overview of how we kind of structure the program, how we structure it to date. So basically DOE enters into partnerships with utilities, state and local governments, nonprofit organizations, and then those organizations oversee what we call "qualified assessors." These assessors go into individual homes, collect the data, score the home, and then provide that information to the homeowner.

Slide 11:
The requirements for the programs listed on slide 11 are fairly, not very onerous, I should say. There is an annual commitment of scoring at least 200 homes, and then given that we are interested in making sure that these are consistently done, we do require that 5% of homes are rescored for the purpose of quality assurance. We provide free testing and training online. So we do ask that the partners that do administer those tests to the assessor you know, provide a place

for that to happen. We do provide monthly webinars where we encourage Partners to call in and share information about what's going well or not well in their program. But to join, you basically just sign a Partner agreement, then we have some calls with you, where we figure out how it is you're planning to implement your program. And then you can get started. Slide 12: We do provide assistance as much as we can to our partners. Obviously we're not doing a lot of one on one with assessors, but we do try to help Partners get started and we provide marketing materials that you're welcome to use or not use as you see fit. Whether it's things to put on your Web banner, on your website or marketing materials you can use for your assessors. Or to give directly to homeowners.

Slide 13:
In just this past December when we released the latest version of the scoring tool, we also released the new version of what's called an "API" which is an Application Programing Interface. The reason we did this is that -- and this has been around since the beginning of the program as well -- it basically allows software vendors and others to use the scoring tool without actually having their users go directly into the website that we have for the scoring tool. I didn't say that very clearly. But basically, what it is, is one software can speak to our scoring tool behind the scenes, and transfer the data and then generate the score. So you are still using our algorithms and our tool to generate a score. But you don't actually have to go into our scoring tool directly. So if for instance you have a program where you have a specific auditing software that you are using the score can be generated alongside that without creating a lot of additional work. We do have a bunch of partners who are using the API. Energy Savvy has been using it with some of our partners. Minnesota CEE, the Center for Energy and Environment, developed a handheld app. United Illuminating Utility in Connecticut actually developed their own handheld app for their own program; I think it's called Home Energy Solutions. It also generates the score at the same time. There's a lot of different ways you can flexibly integrate the scoring and the score into your programs. And that's kind of what we're aiming for. We're trying to make this as flexible and as easy as possible. While consistent across the county.

Slide 14:
Slide 14 just shows you some of the pictures of the nice tool that Minnesota CEE developed so, you know, it can be used on a tablet, and it's nicer-looking than the ones that we have, but obviously, if you aren't using a different software tool you certainly can go directly into our scoring tool and use it directly. OK, with that, I am going to pass it back to Cortney.

Cortney Krauss:
OK, so we are going to go ahead and launch our second poll. Here we go. OK, and we are interested in what type of industry organization do you represent? We want to know who is on the line today. We've asked: utility, government, nonprofit, realtor, appraiser, and other. We apologize, we could only have five options here. So we know there are probably a lot of folks on the line that fit into a different category. ... OK, so about 90% of the people on the phone have responded. So I will go ahead and close the poll and let's take a look.

Results shown on screen: OK, so you can see we have about 15% of the people on the line represent a utility. About 23% of folks on the line represent a government organization. 22%

represent nonprofits. 2% represent a realtor and/or appraiser. And 37% represent other organizations.

Joan Glickman:
Great! So it sounds like we have a good mix of folks! Great, thank you. That's terrific. And that's kind of representative of the kind of folks that we work with day to day. And I think we have a good mix of state and local governments, as well as industry partners, utilities etc. We haven't ventured too far into the real-estate mode and area, but that is something that we obviously see as an important area for us to develop in the future.

Slide 17:
So on slide 17, you see a map of our partners around the country and really our success in the last year is, can be contributed to their diligence and commitment to making sure this is a good program and that it works well. And so we have learned a tremendous amount from many of our partners who have kind of of told us what's working well, and what hasn't worked well and we have done a lot to try to address any concerns they have had.

Slide 18:
On slide 18 you will see that we've had about 30 partners join to date.

Slide 19:
I think at least on my slide, I can't see what's up there, but there's a typo. Hopefully it says "8,500+" homes it's not 85,000! So more than 8,500 homes have been scored since the summer of 2012. We have close to 200 Qualified Assessors. And one thing we are very excited about is working with a number of states to try to integrate this into state-like programs. So Connecticut, Vermont, Missouri, and other states have all been working towards that and we're excited to continue to work with them to make sure it works well. There and then also to work with others. I know others are interested. I know Oregon is in the process of figuring out what makes sense for them. Florida has had some recent changes and there are other places as well that are considering how to create a system that can consistently provide information to homeowners at a reasonable cost. Recently BPI - the Building Performance Institute - approved our training so you can receive 2 CEU credits if you are a BPI-affiliated individual, and if you take our training then you do get those credits. Which I think is a great benefit. And as I said, we also have continued to do our outreach, our account management support to our partners. We added a partner portal, so the partners can get information directly from our website. And soon, I don't think it's available yet, as a feature, the partners will be able to download any information that's done on houses in their area. So, if they have 20 assessors that they are managing, they can collect all the data that's been collected, and enter it in by those assessors on homes in their area. And I think a lot of our partners find that to be useful. We have made significant improvements to the scoring tool. And to our methodology for scoring, and I'm going to talk about that in a little bit.

Slide 20:
So what we learned most fundamentally was that we needed to make some changes to the scale. Not to the fact that it's 10 points; I think people like that, it's easy to understand, and that was something we got a lot of positive feedback on. But the problem was that -- I am not going to go

into a lot of detail on this but -- basically, what was happening we were scoring homes on how much energy a home was expected to use under standard conditions. And that was total energy for the home, including its base load, but the recommendations we provide are all based on the home assets components. So it's envelopes, and it's heating, cooling, and hot water. Not on its plug load, and so, what was happening was that people were kind of getting stymied by that, they were kind of getting held down by the base load component of the energy use, and not able to move up the scale. So what we did was, since we're only providing recommendations, on how to improve the asset components, the home is now just scored on what we call asset energy use. And again that's heating, cooling, and hot water load. What happened by doing this is really, it allows homes to more easily move up the scale with improvements. The other thing that was happening is that larger homes, particularly because they had a large base load because plug load was associated with the size of the home, they in particular were doing very poorly. And though, although homes that are larger are still going to be using more energy than smaller homes. The fact that we have taken the plug load out, has allowed there to be less of a differentiation between the large homes and small homes. While there is still some, large homes can actually improve their scores now, as opposed to previously where many of them were sort of stuck in the lower range, and not able to move up. We also learned that from some of our smaller partners in particular, our current requirements for assessors are that they have to be either BPI-certified as building analysts or certified as HERS raters. And that has been bit of a barrier for some of particularly of our smaller partners as I said, who don't have too many people on staff or even anyone on staff who has that qualification. So, what we are looking at, and what I will discuss later, is ways that we can perhaps find other appropriate requirements, but not requirements that are going to be limiting such that requiring things that you don't necessarily need to know in order to score a home effectively.

As I said previously, we found out that from a number of states are looking for flexible/easy rating methods and are seriously considering or are adopting Home Energy Score, and in particular I think what has been effective about it is that we tried to allow as much customization as possible, and so we are really working towards making this even easier to customize the information. We still want it to be consistent so that homes are consistently scored, using the scale and that people are given the actual score, but if you choose to give the homeowner different information that we haven't seen as essential, but you do, then we certainly allow that, and we certainly allow you to prioritize how you provide that information. And I mentioned briefly that partners are able to download the data that their assessors collect in the field. And what we have learned is that not only is the score effective in helping to motivate homeowners, and helping sell programs. But it turns out as a sort of additional benefit, having this data easily accessible and in an easy format for analysis is very helpful to utilities and to other because it's just a simple way that you can collect information about the housing stock in your area, and track that and determine you know where you want to go with incentive programs or other types of ways that you might want to target your programs.

Slide 21:
OK, so next I am going to move onto more recent developments. So, moving to slide 21. As I said, we did find that having the current requirements for assessors was a bit limiting. We still have those requirements. Right now you're required to have certification as I mentioned, but you are also required to pass a two-part exam that we offer online for free. What we decided to do

was kind of beef up the training that we provide, so we are working with a company called Interplay to develop a 3D simulation tool, and it's been developed now and we are in the process of testing it. Basically what it is, is your can go log on, and or just access the tool on the Web you can basically go through three different homes and then there is endless permutations of the these homes where you know you see different features of heating, cooling, and hot water and insulation and all that. And so all the things that we care about in terms of the data points that are measured, that's really what the simulation tool focuses on. It focuses on training the individual who's going through it. Right now what we're doing is testing that by actually having volunteers go through it; in addition to just doing user testing with it, we are actually taking folks that have certification as a BPI or BPI building analyst and HERS raters, having them go through it, as well as folks that don't have that background, but might be home inspectors or might be in the HVAC industry, having them go through it. There's a test associated with it. Once those folks go through it, pass the test, those who do pass the test, we are then taking them into some specific homes where they go through, they score them, and what we are going to be doing to sort of validate whether or not or to assess whether or not this new training tool is effective in truly training folks to be ready to score a home. We are looking at how the folks that have certification, versus the folks who don't have certification do in terms in actually scoring real homes. So, hopefully I didn't make that too complicated. But basically the upside of that is that we are trying to find alternatives to the current certification level that we currently require. And sort of jointly using this training tool and testing tool in conjunction perhaps with other certification or other training to basically reduce the certification level and requirements for assessors. We're certainly not going to make it so simple that just anybody can go through a home, and therefore you don't even have a lot of credibility in terms of what's being provided. But we did recognize that the current requirements were perhaps more than were needed in order to score a home effectively. OK, so now I am going to turn it back to Cortney, who I think is going to show a quick demo of the 3D tool.

Video narrator [with video shown on screen]:
"Welcome to the Home Energy Score training simulation. This Web- based immersive 3D training tool has been designed to quickly get you up to speed on how to accurately calculate a Home Energy Score. It will also help prepare you for both the written and simulation exams required to become a qualified Home Energy Score Assessor. The 3D training is lifelike, and presents a wide variety of home scenarios ranging from the simple to the complex. You will learn how to identify different heating and air conditioning systems, assess floor and window area coverage, measure ceiling heights, and calculate insulation levels within the home. Throughout the simulation there are tools and practical tips to help you accurately record the homes' energy data. Importantly, the data entry form replicates the actual Home Energy Score tool. Practicing the simulation will translate well into the real world. Once you have completed the simulation, you will receive an easy-to-understand feedback report. So you can monitor your progress and improve your performance. With successful completion of the Home Energy Score training simulation, you'll be well on your way to becoming a qualified home energy assessor."
[Video ends.]

Joan Glickman:
Great! Thanks very much. So that gives you a quick better introduction to the tool than I gave

you, but there is obviously much more to it, and we look forward to using it, and launching that piece of the program probably in April.

Slide 23:
So, moving to slide 23, as I said earlier, we're very much dedicated to making sure that this program is effective, and that we continue to improve it, with lessons learned from our partners, and with research that we are doing. Recently we asked the Sheldon group to conduct some focus groups for us in Atlanta, and we learned additional information from that. Basically we were trying to gauge what about the information we're providing with the Home Energy Score is most effective, what's clear and what's not clear. And what's most likely to really effect change. Obviously, as I said previously, what we're really aiming the program at is getting, whether it's homeowners or home buyers, either one, to invest in improvements and for the improvements to pay off when you are actually selling the house. So what we found was that -- and we are moving away from the 10 years saving number. Right now it shows 10 years saving on the future, I mean, on the first page. And folks actually would like to see annual savings. Although the reason we picked 10 was that obviously the math is pretty simple to do, they still preferred just the annual number, so we're moving back to showing just an annual number, which was something we actually started the program with. We found out from the focus group that something we had actually heard also from others is that the technical terms on the home facts are confusing, and although many homeowners don't need to know or want to know all the details, others might. So we need to provide either a glossary of terms for some more clarity to the home facts. And while we were trying to make it as short as possible, clearly we need to make it clear, as well. We also found out that from these focus groups that people would really like to have more of an action list in terms of not just recommendations of what they can do, to improve the home but sort of the next steps as to who they should contract with, who they should call for estimates for those improvements. And, obviously this is not something that DOE is going to get involved in, but I think utilities and nonprofits, you know, obviously have a big role to play here, and can do more to supplement the information that the Home Energy Score is providing.

They also wanted to see cost estimates for the improvements. So how much in terms of, not only how much you are going to save, but how much it would cost to get to those savings. It's funny because originally we did include payback information, which obviously implied a cost. The reason we took that out is that a lot of contractors didn't want us to presume we knew what they were going to charge in specific locations for different kinds of improvements. So, we took that information out. We still use cost information to help us determine which improvements are cost effective. We have a 10-year payback cutoff for our first-level improvements. The ones that are not the replacement improvements, but the others. Since they do want to see that information, obviously that's something I think that utilities and contractors and non-profits, and state and local governments will be much more likely to be able to be able provide that kind of information at the local level. Although some folks were not in favor of big government, they seem to like having the DOE seal there, having it lend some credibility to the information that was being provided. So that was good to hear. Many focus on the fact that they really wanted to see the point of sale, and they would like it added to home inspection reports. Which is something that we certainly thought, but it was good to have that reinforced and confirmed.

Slide 24:
Moving to slide 24. We're still undertaking other kinds of analysis in this upcoming year to make sure that the program is effective, and that we can make is as effective as possible. I should say we're acting on many of the recommendations that we heard out of the focus groups, things that we thought would more generally resonate with folks. So, we're making some other improvements, and I didn't go into all of those details. But in terms of evaluation study, we're working with Energy Savvy, who supplies software to many of our partners. And what we're doing with them is basically doing a blind study where our random sample of folks are selected to receive the Home Energy Score, and then a random set is not going to receive the Home Energy Score, otherwise they will be treated similarly, or equally. So if I think, if the utility is providing, or the program administrator is providing, a home energy audit, they will get that information, and then half of the folks will also get the Home Energy Score, and half of them will now. So then they will be tracked, and to see if there is a difference in terms of who makes improvements, and what the extent of the improvements are. So if you see deeper retrofits with one group versus the other, and whether or not there is a higher conversion rate, hopefully with those who receive the Home Energy Score, we want to know that.

Slide 25:
We're also doing a study shown on slide 25. We're doing some recognition studies we're working with David Rand at Yale, and other experts in the field to basically look at are there other ways that we can kind of beef up the value of getting a Home Energy Score. For instance, if you couple it with some type of recognition, whether it's sending somebody a mug as shown here, or giving them a Facebook widget or something that would basically make their investment visible to others. Does that actually make a difference? So we are going to testing that I believe with New Jersey Natural Gas to see if there is a difference in terms of uptake rates by those who are recognized versus those don't have that featured in there. OK, I will now turn it back to Cortney.

Cortney Krauss:
OK, great! So here is our third and final poll of the day. And it says: "Why are you interested in the Home Energy Score?" We know all of you have some interest if you're on the webinar today. But here are maybe some different avenues you can pursue. So, your organization is interested in becoming a partner? You or your organization is interested in becoming a Qualified Assessor? You're interested in application programing interface (the API)? You are interested in the 3D simulation testing and training software (the video we showed). Or, perhaps some other reason. We will let the responses roll in ...

OK, so we have got 80% of the people on the webinar have responded, so I will close out the poll, and I will share it. As you can see, 25% of the people on the line are from an organization that are interested in joining, so that's exciting to hear! We will certainly share some information with you on how you can join. About 29% are interested in becoming a Qualified Assessor. Again, we can also share some information on how you get in touch with different partner organizations who can help onboard you as a Qualified Assessor. 27% of people are interested in the API. 25% are interested in the 3D software. And 56% of people are are on for some other reason. So, we have our contact information at the end of the webinar, but we would love to hear from you and provide any material that may be helpful to pursue your relationship sort of with the Home Energy Score. I will hand it back to Joan.

Joan Glickman:
OK, thanks. So, actually since I don't have this on here, but since there are a number of folks who are interested in becoming Qualified Assessors, I should say that one thing we are trying to move towards in the future -- although I showed the implementation model that we're using right now where we have individual partners overseeing assessors -- we know that there are a number of folks out in the field who would like to offer the score as part of their work, but are not in a place where it's currently being used by a partner. So what we're thinking about doing is looking to a model where we have some kind of other quality assurance providers that the assessors would either pay into or somehow, obviously it wouldn't be something that DOE runs, but some way that their work could be assessed and have quality assurance preformed on it. So they're basically playing the role of a partner, without it being exactly a partner. So, we want to make sure there is quality assurance, and DOE is obviously not in a place where we could go and assess 5% of the homes that are being assessed. We can't rescore those. But if we can find entities that can do that responsibly, then that is something we would like to move towards. So that it can be provided in a wider way.

Slide 28:
OK, so I think we have four more slides, and I want to make sure there's time for questions. So, quickly. We made a lot of improvements to the scoring tool. I already talked about the fact that we think there is significant improvement in terms of your ability to move up the scale. Being moved from 250 weather stations to a 1,000 weather stations, which just means that it's taking into account like your local weather more effectively. We've made other very specific things like, you know there is great ability to characterize different kinds of ducts if you have more than one system. You can more simply score townhomes, if that's what you are scoring in your area. We've added grounds for heat pumps, and heat pump water heaters as types of systems that you can include, and now you can kind of keep track of what type of assessment you are providing. So, if it's a final report, or if it's a quality assurance report or a test, all of that is shown on the actual score.

Slide 29:
Slide 29 are some pretty graphs, basically, showing how the 8,000 homes that we've have scored to date or that were scored by our partners to date, if you basically plot those in terms of how they scored, the blue on the top left shows how they scored previously, and how they score now given the new system. I think what's most important here is showing that there is an ability to move up, which you can see there is kind of a shift more to the higher numbers with the 2014 upgrade. In terms of the potential jump, although there are still going to some homes that are not able to move very much. We think there is definitely going to be an improved ability to do so. And you can see that there are many more homes that can even get up to 9 points of jumping, which is obviously not going to be very common, but, you know, you will be seeing homes that are able to jump 4 or 5 points. Although many will still jump 3, depending on where they are starting, or 2.

Slide 30:
OK, so lastly, we think it's a great time to become a partner, so I am very encouraged and excited to have so many of you on the phone who are interested in learning more about doing that . It's easier to do so; we think that there's improvements now to the API in terms of making it easier

for software developers to integrate it into their software. We are doing a lot as I said to work with experts to target our messaging more effectively, and making sure that all of you can benefit from that. And I've already talked about the simulation training and testing, and we will continue, as I said, to be dedicated to making improvements which to the tool, improvements to the program, and allowing greater customization. I am going to make a quick pitch on the next slide for our commercial building energy asset score.

Slide 31:
If you are interested in doing work on the commercial side, or do so, we can score all types of buildings, schools, retail, office, etc. It's very similar in a lot of ways to the Home Energy Score, in that it's an asset score. It's not as far along; it's just been pilot-tested for the second time. But if you're interested, please let us know.

Next slide:
So with that, I am going to turn it over to Cortney to read out some questions that hopefully we received.

Cortney Krauss:
Great! So we have a lot of questions here, Joan. We'll definitively get through as many as we can in the next 15 minutes. If for some reason we cannot get to your question today, we're happy to reach out to you. Also, feel free to email us, which we can share that email address on the next screen. OK, so here we go.

The first one is, "Is the software able to import HP XML? Test end data at this time?"

Joan Glickman:
No, but it will be up to HP XML standards and use of that standard by the end of this year.

Cortney Krauss:
"Does the Home Energy Score require a blower door test to be conducted?"

Joan Glickman:
It does not. You can include a CXM50 number if you do a blower door test, but you're not required to do so. And that's based on sensitivity analysis that we did in the first year of testing in 2011.

Cortney Krauss:
"Does the Home Energy Score include installed PV solar?"

Joan Glickman:
It does not, but we are planning to include PV in the next few months. Hopefully, I don't know want to promise before a year, but hopefully, within six months. Certainly with the next version of the scoring tool. And we will do updates with the scoring tool every year.

Cortney Krauss:
"How is the carbon footprint estimated?"

Joan Glickman:
Good question! I haven't thought about that in a while. It's basically estimated in terms of how much energy is the home using today, or predicted to use today, versus how much would it use with the improvements, and then it's seen as a percentage reduction. I believe, although I have forgotten. Glenn, can you help me out here?

Glenn Dickey:
Joan, we use the regional e-grid data for determining the carbon amounts and then using the energy calculations and fuel mix to determine the footprint.

Joan Glickman:
Thank-you.

Cortney Krauss:
"Can only qualified assessors use the scoring tool? Or are homeowners able to use it, as well?"

Joan Glickman:
You have to have an assessor ID and a password to get into the scoring tool. So the answer is, only Qualified Assessors can score homes. If the homeowner wants to find out what they can do in their home independent of that, they can use something called Home Energy Saver. It's run on the same software, or energy model I should say, but it does not score the home. It will provide lots of information depending on how much information the homeowner chooses to put into that tool.

Cortney Krauss:
Joan, I think you've answered this question in part, but this one's a little bit more specific. "Has any thought been given to expanding the assessor qualification, beyond BPI and RESNET?" And this person is specifically interested in the the ITC residential energy inspectors.

Joan Glickman:
I don't think I know enough about that specific certification or professional affiliation. But yes, we are definitely looking at expanding to other types of qualified users including home inspectors.

Cortney Krauss:
"Is geographic region considered in the assessments?"

Joan Glickman:
The assessments basically, while you still have to collect all the same data points, regardless where you are in the country, the energy model is run based on estimating what the loads would be in that specific location. So it takes your ZIP code, it associates that ZIP code with your closest weather station, and then the energy model uses that weather data to predict how much energy you would be using. I hope that answers the people’s questions.

Cortney Krauss:
Somebody has a question about us excluding the base load and they said, "Doesn't base load, a plug, and pipe load exclude about 30% or so of the home energy use?"

Joan Glickman:
I think that's about right. You still get an estimate of how much -- so, on the home facts page, it will tell you how much energy we predict that home will use under standard use condition. So the standard use conditions are: setting your thermostat at a certain level, having showers of a certain length, etc. But, to score the home, we use what we call the asset energy use, which is just that portion that excludes the plug load; it's the portion associated with heating, cooling. and hot water. And the reason we exclude plug load, it that a lot of that is TV, and lights that might not convey with the home. So, we only focus on those pieces of equipment, and the conditions of the home that would convey at point of sale. We have defined that to be heating, cooling, hot water, and envelopes.

Cortney Krauss:
And that would explain why lighting load isn't included? Somebody specifically asked about lighting load, as well.

Joan Glickman:
Yeah. We estimate how much a home is likely to use, but we do not collect information about its specific lighting. On a commercial building, we do obviously include lighting because it's more of a fixed asset. With homes, it's harder to do, because some people have lamps, some people have recessed lighting. It's hard to then put it on an "apples to apples" basis.

Cortney Krauss:
When we talk about, Joan, you know, small homes versus large homes. What's the cutoff? So what is considered a large home?

Joan Glickman:
We don't -- OK, so we ask the assessor to provide square footage in terms of how much conditioned square footage there is in the home. Based on that, we then calculate what the heating, cooling, hot water loads would be, based on all the other data that was provided about the systems. We don't do any kind of cutoff in terms of square footage. So the scale is not based on your square footage. It is based on how much energy we predict that that home will use based on the condition of that home, and where it is located, etc. I'm not sure I'm answering this correctly. But what we found is that by taking base load out, you can, again, a larger home will probably -- if everything else is equal, a smaller home is going to less energy than a larger home. So, the smaller home will score a little bit higher. But that's not to say that a large home couldn't score well on the scale. It certainly could; it just has to be more efficient. It can move up, it may not be able to score a 10 if it’s a 5,000- square-foot home. Or maybe even a 3,000-square-foot home, it really depends. That's also why we are considering how to factor in PV. In a larger home, if they have PV, might in the end be able to offset the fact that it's large, with putting PV on the roof. We haven't determined how that will factor into the scale yet.

Cortney Krauss:
"Have we considered a partnership with a Web-based real-estate company such as Zillow to display the rating for homes?"

Joan Glickman:
We have. I talked to them early on, and I think that before even considering including information, they have to have like a million houses that feature that information. So we are not close yet, but it could be that in certain regions it would make sense to have them do that as the score becomes more popular. And we certainly are working with the folks that determine how information is set on the MLS, there's 850 different MLSs around the country, and each one, I think is run independently by their own MLS board. They have to determine what information is shared. We are creating the information in a way that it could be easily shared with MLS organizations if they choose to do so.

Cortney Krauss:
"Is it possible for folks who are interested in testing the scoring tool to have access to it?"

Joan Glickman:
Yes. We will provide you with access to either the test site, which will basically do everything that the other site does, it's just that it will say preliminary or sample on the score report. But you can let us know if you want to get access to the tool, and we can work with you to do that.

Cortney Krauss:
"On average, how much does the Home Energy Score cost homeowners?"

Joan Glickman:
It's really market-driven, and so our partners are free to choose however much or little they would like to do in their area. I think many people are offering it as an add-on to an audit, so they may not be charging additional, but, from what we have heard, people are likely to change somewhere between $50 and a $100 for the score.

Cortney Krauss:
"Is the Home Energy Score an alternative to Home Performance with ENERGY STAR for homeowners? How are the two marketed together or separately?"

Joan Glickman:
We obviously have both programs managed at DOE, and so we do work together. Home Performance has been been going through its own development and iterations of that program. I know they are looking into what types of recognition makes sense. There are home performance programs that offer certificates. It hasn't been formally integrated, but certainly many of our partners are integrating it into their home performance programs. It's basically an add-on feature that you can use. It doesn't take the place of Home Performance, because it's really a rating and scoring system. It's not a system for actually carrying out the improvements. Which really what Home Performance is.

Cortney Krauss:
"What is the average or median score before, and score after, with improvements?"

Joan Glickman:
I don't know if I have that information off the top of my head. I don't actually in terms of the 8,000 homes that have been scored, but we can find that out. The median home for the country is likely to be at 5. We did set the scale, and the way that a 5 is generally going to be associated with sort of the average home. If you are in the lower range of the scoring scale, it will be easier to move up. So if you are scoring a 1 or 2, hopefully you'll be able to get to a 5, 6, 7. If you are scoring a 7, obviously to begin with, you aren't going to be able to move up as much, and maybe you will move to an 8 or 9. If you are starting at a worse end of the scale, you'll have more opportunity for jumping a larger number of jumps. Go ahead, sorry, Cortney.

Cortney Krauss:
"How is the Home Energy Score different from REM Rate?"

Joan Glickman:
We have analysis that we have done. REM Rate is one of the scoring systems that used for HERS, or accepted by HERS, to produce a HERS rating. Home Energy Score and HERS are completely different kinds of rating scales. HERS is typically used on new homes; Home Energy Score has been used basically on existing homes, and that's what it was created to do. We do test the efficacy of the Home Energy Scoring Tool and its ability to predict energy use, against actual homes with actual utility bills, and we test the ground rate as well, the Home Energy Scoring Tool does at least as well as REM Rate.

Glenn Dickey:
Joan, if I could throw one other thing in there that, the primary difference Home Energy Score and a rating, whether it be by REM Rate or some other software, is that the RESNET standard compares the existing house against a fictitious house that's built to code. Whereas Home Energy Score takes the energy use and compares that across a range of energy use for that weather station. So it's a comparison against the absolute scale, whereas a rating is against a code home of similar design.

Joan Glickman:
Thank-you for saying that.

Cortney Krauss:
OK, we have time for probably just a couple more questions here. But again, I will say, if we did not get to your questions today, please feel free to reach out to us. Our email address is on the screen. So it's HomeEnergyScore@ee.doe.gov, and we will gladly answer it there. Again, we have another minute or two still: "Joan, will a home that earns a score of a 7 today be as efficient as a home that earns the same score 10 years from now?"

Joan Glickman:
Probably not. Because the scoring tool will, although we don't plan to change the values of the scale every year, certainly we do not expect to do that, maybe in 10 years we would because we

do need to reflect what's going on in the housing stock. And so, as housing stock becomes more efficient, it could be that the 10 becomes more stringent. But, I don't think it's going to change that much, to be honest with you because there is so much room for improvement, I don't think it's going to happen that quickly. But, it could potentially change in 10 years. You can automatically rescore the home based on the latest version of the scoring tool though, I should say. Go ahead, sorry.

Cortney Krauss:
OK, great, that was actually the follow-up to that. "How do local governments balance current workload and staffing with limited funding?" So someone is interested in joining us as a partner, what should they expect in terms of time and resources?

Joan Glickman:
I think it's probably good for that organization to get in touch with us, and we can talk though it. I don't know a quick answer to that one. I'm sorry.

Cortney Krauss:
With that Joan, I think being conscious of 1:00, do you have any final words for the crowd?

Joan Glickman:
I don't, but I do really appreciate the time to join us, and please let us know if you want us to follow up with other additional webinars on specific topics, or another opportunity to ask questions. We are happy to do that. I know we got cut off here in terms of questions, I apologize for that.

Cortney Krauss:
OK, great! Well, again, thank-you very much again for joining today, we had a great turnout, fantastic participation. Please, please, please feel free to reach out to us as HomeEnergyScore@ee.doe.gov and we are more than happy to email you back, or set up an additional follow-up call. So with that, we will go ahead and sign off, and have a wonderful afternoon. Thank-you!